

The following is a list (not all inclusive) of states that contributed material and food for building Hoover Dam (Boulder Canyon Project) during the 1930's. The labor force probably came from all over the United States during the 30's and The Great Depression, average age 32, 40% were unmarried, average daily workforce was over 3000 men, during peak building years (1933-35) over 5200 men.

NATIVE AMERICANS' CONTRIBUTION

High scalers (drilling, blasting, smoothing out a portion of Black Canyon so the foundations of the dam and power plant could be laid), Native Indian tribes such as Yaqui, Crow, Navajo and Apache, various Southwest Indian tribes provided symbols on terrazzo floor in dam and power plant that symbolized power and electricity.

AMERICA'S CONTRIBUTION

ALABAMA

- Lumber for Hoover (Boulder) Dam Project
- Bulkhead gate hoists, Hardie-Tynes Mfg. Co., *Birmingham*
- Trash racks for intake towers, Ingalls Iron Work Co., *Birmingham*.

ARIZONA

- Real estate for ½ of Hoover Dam
- Rock and gravel to mix with Portland Cement to make concrete of Hoover Dam
- State commission officials plus Governor
- Many tributaries which feed the Colorado River.

ARKANSAS

- Chicken for Anderson Mess Hall in Boulder City
- Lumber for Hoover (Boulder) Dam Project.

CALIFORNIA

- Three of the original Six Companies
 - Bechtel from *Oakland*
 - Kaiser from *San Francisco*
 - McDonald-Kahn from *Los Angeles*
- Power for construction, Nevada-California Power Co., Southern Sierras Power Co., Newberry Electric Co., *Los Angeles*
- Turbines and governors, Pelton Water Wheel Co., (offices) *San Francisco*
- Railroad from Las Vegas to Boulder City, Union Pacific Railroad, Los Angeles & Salt Lake Co., *Los Angeles*
- Drum gates, spillway control mechanisms, Consolidated Steel Corp., *Los Angeles*.

COLORADO

- Western headquarters for Department of Interior, Bureau of Reclamation, Government agency that supervised the building of Hoover Dam, *Denver*
- Testing (scientific) of materials used in building Hoover Dam and appurtenant works, *Denver*
- Sewage and water purification plant, Stearns Roger Mfg. Co., *Denver*
- Marble for terrazzo floor, headwaters for the Colorado River (Rocky Mountains).

CONNECTICUT

- Sureties on performance bond for Six Companies Inc., Hartford Accident & Indemnity Co., *Hartford*
- Crescent wrenches for all workers of Hoover Dam, Stanley Tool Co., *Hartford*
- Elevators in powerhouse, Otis Elevator Co., *Farmington*.

DELAWARE

Aerial photographs of topography & ground surveys, Aerotopograph Corp. of America, *Washington D. C.*

FLORIDA

Cypress wood for arches and tunnels inside Hoover Dam
Marble for terrazzo floor.

GEORGIA

Marble for terrazzo floor
Lumber for Hoover (Boulder) Dam Project and power plant.

IDAHO

Morrison-Knudson Co., one of the Six Companies, *Boise*
Lumber for Hoover (Boulder) Dam Project and power plant.

ILLINOIS

Governors for turbines, Woodward Governor Co., *Rockford*
Manual telephone apparatus, American Automatic Electric Sales Co., *Chicago*
Tractors, Caterpillar Tractor Co., *Peoria*
Sculpture work & star chart for Hoover Dam, Oskar Hansen, *Chicago*; (Norwegian).

INDIANA

Penstock pipe 30' diameter, 2 3/4" thick boiler plate steel
Engineered by Purdue University, *Lafayette*
Structural glass work, Sanitary Construction Co., *Indianapolis*
Elevator shaft in Visitors Center; Frontier Kemper Construction Inc., *Evansville*
Structural steel for Hoover (Boulder) Dam Project, Bethlehem Steel Co., *Gary*.

IOWA

President Hoover's birthplace and home (31st President of the United States, humanitarian, engineer, conservationist and statesman) to presidential library, *West Branch*
Gasoline locomotive, Davenport Besler Corp., *Davenport*
Metal work & concrete mixing plant, Pittsburgh Des Moines Steel Co., *Des Moines*.

KANSAS

Petroleum products, work boots for workers.

LOUISIANA

Hemp rope for Hoover (Boulder) Dam Project and high scalers.

MAINE

Construction superintendent & master dam builder, Frank T. Crowe, University of Maine
Lumber for Hoover (Boulder) Dam Project and power plant.

MARYLAND

Sureties for bond for Six Companies, Fidelity & Deposit Co., *Baltimore*
Miscellaneous switching equipment for electricity, Wolfe & Mann Mfg. Co., *Baltimore*.

MASSACHUSETTS

Motor operated gate valves, Chapman Valve Mfg. Co., *Indian Orchard*
Insulated cable, Eagle Electric Supply Co., Simplex Wire & Cable Co., *Boston*.

MICHIGAN

Cranes and hoists, Shaw Box Crane & Hoist Co., *Muskegon*
Ventilating and air cooling equipment, American Blower Corp., *Detroit*
Dump trucks, Ford & Chevy, General Motors Co., *Detroit*
Lumber for Hoover (Boulder) Dam Project and power plant.

MINNESOTA

In-house power plant generators, Electric Machinery Co., *Minneapolis*
Lumber for Hoover (Boulder) Dam project and power plant.

MISSISSIPPI

Lumber for Hoover (Boulder) Dam Project and power plant.

MISSOURI

Hatch frames and covers, structural steel, rails for turbine gallery crane runway, Stupp Bros. Bridge Iron Co., *St. Louis*
Portable transformer track for power plant, Kansas City Structural Steel Co., *Kansas City*.

MONTANA

Lumber for Hoover (Boulder) Dam Project and power plant.

NEBRASKA

Miscellaneous metal work for power plant, Omaha Steel Works, *Omaha*.

NEVADA

Real estate for ½ of Hoover Dam
Earthwork, concrete and erection of warehouse, Storm & Mahoney Inc., *Las Vegas*
Employment offices for laborers at Hoover Dam, Las Vegas; Union Pacific Railroad from Las Vegas to Boulder City
Construction of high school building in Boulder City, White & Alter Construction Co., *Elko*
State commissioner, Governor Richard Kirman Sr.
Telephone lines, Southern Nevada Telephone Co., *Las Vegas*
Food for workers on the project, Anderson Mess Hall (provided food for actors in Hollywood), *Boulder City*.

NEW HAMPSHIRE

Granite for terrazzo floor of Hoover Dam and power plant.

NEW JERSEY

Fifty ton cable way, Lidgerwood Mfg. Co., *Elizabeth*
Fire extinguishing equipment for power plant, C-O-Two Fire Equipment Co., *Newark*
Pelton Water Wheels (in-house generators for power plant), built in *Atlantic City*.

NEW MEXICO

Boulder City grading, paving, surfacing, curbs, gutters, sidewalks, sewers and water systems, New Mexico Construction Co., *Albuquerque*
Terra cotta tile for 705 gallery (?)
Tributary for Colorado River (San Juan).

NEW YORK

All steel plate outlet pipes, Babcock & Wilcox Co., (office) *New York City*
Bronze winged statues at Hoover Dam memorial, General Bronze Corp., *Long Island*
Generators for power plant, General Electric Co., *Schenectady*.

NORTH CAROLINA

Tables, chairs, work clothing and lumber for Hoover (Boulder) Dam Project and power plant.

NORTH DAKOTA

Food products, cereals and grains.

OHIO

Turbine gallery crane, Alliance Machine Co., *Alliance*
Aluminum metal rolling doors, The Kinnear Mfg. Co., *Columbus*
Electric elevators for canyon wall valve houses, Houghton Elevator Co., *Toledo*
Steel for 30' diameter diversion pipes, Babcock & Wilcox, *Baberton*
Structural steel for Hoover (Boulder) Dam Project, Bethel Steel Co., *Youngstown*.

OKLAHOMA

Transmission towers for city of Los Angeles, Tulsa Boiler & Machinery Co., *Tulsa*
Petroleum products for Hoover (Boulder) Dam Project and power plant.

OREGON

87,000,000 bd./ft. lumber, Chapman Lumber Co., *Portland*
Two of the original Six Companies, Pacific Bridge Co., J. F. Shea & Co., *Portland*.

PENNSYLVANIA

Aerial topography and ground surveys, Brock & Weymouth, *Philadelphia*
Stoney gates hoists, Reading Iron Co., Reading; structural steel, Bethlehem Steel Co., *Bethlehem*
Transmission towers and switchyard structures, American Bridge Co., *Pittsburgh*
Cylinder gates for intake towers, Westinghouse Electric Mfg. Co.
Also some original generators, *East Pittsburgh*
Portland cement for concrete mixture of dam, Reliance Steel Products Co., *Rankin*
Four turbines, I.P. Morris, *Philadelphia*.

RHODE ISLAND

Granite for terrazzo floor, oak for wood forms of dam and power plant.

SOUTH CAROLINA

Work clothing, lumber for Hoover (Boulder) Dam and power plant.

SOUTH DAKOTA

Food products, cereals and grains
Lumber for Hoover (Boulder) Dam and power plant from Black Hills.

TENNESSEE

Butterfly valves and internal differential control valves for spillways, Johnson City Foundry & Machine Co., *Johnson City*.

TEXAS

Oil and petroleum products, citrus and vegetables for Anderson Mess Hall in Boulder City.

UTAH

Construction of six 4&3 room residences in Boulder City, Louis J. Bowers, *Salt Lake City*
Construction of school for Boulder City, I. M. Bay, *Junction City*
Transmission lines, Pickering Bros., *Salt Lake City*
One of the original Six Companies, Utah Construction Co., *Ogden*
Tributary for Colorado River (Virgin).

VERMONT

Oak for Hoover (Boulder) Dam Project
Granite for terrazzo floor.

WASHINGTON

Highway, Boulder City to damsite, General Construction Co., *Seattle*
Tow boat for Lake Mead Reservoir, Tregoning Boat Co., *Seattle*
Lumber for Hoover (Boulder) Dam Project
Control panels for generators (modern), Schweitzer Engineering Lab, *Pullman*.

WEST VIRGINIA

Lumber for Hoover (Boulder) Dam Project.

VIRGINIA

Turbine for power plant, Newport News Shipbuilding & Dry Dock Co., *Newport News*
Lumber for Hoover (Boulder) Dam Project.

WISCONSIN

Four turbines for power plant, shafts for generators, Allis-Chalmers Mfg. Co., *Milwaukee*
Overhead traveling cranes for power plant, Harnischfeger Sales Corp., *Milwaukee*.

WYOMING

State commissioner, engineer, Governor Leslie A. Miller
Lumber for Hoover (Boulder) Dam Project
Tributary for Colorado River (Green)

CONCRETE RESEARCH

United States Bureau of Standards
University of California
University of Colorado
Purdue University
Portland Cement Association, Chicago, Illinois

FOREIGN CONTRIBUTORS

Terrazzo floor throughout Hoover Dam and power plant, J. B. Martina Mosaic Co., *Denver*, Colorado. (Italian craftsmen)

Generators last uprated from 1988-1993 by

G. E. Of Canada, Peterborough
OntarioMarine Industrie Limitee, Tracy-Quebec

Breakers (modern), Hitachi, LTD., *Tokyo*, Japan

Transformers (modern)
ASEA (Sweden)
SMIT-NYMEGEN (Holland)
ASEA BROWN BOVIER (ABB) - (Sweden)

Power plant overhead cranes, Pauline & Harnischfeger, (German company) *Milwaukee*, Wisconsin

Bronze sculptures and star chart, Oskar Hansen, (Norwegian) *Chicago*, Illinois

SOME DAM COMPARISONS (OR DAM FACTS)

Two earth and rock replicas of the largest pyramid in Egypt could be built by all the rock excavated to anchor the sides and the base of Hoover Dam.

Half a million loaves of bread a day could be baked by all the heat generated by the setting concrete of Hoover Dam.

Visualize a 39 story building with all but a few of its top floors under water - that's the size of the intake towers.

A herd of 37 elephants, each weighing 5 tons, could be carried with ease by the cable way across Black Canyon near the parking garage.

The weight of Hoover Dam (6,600,000 tons) is equal to the weight of the Queen Mary luxury liner (when it sailed the ocean blue).

If Hoover Dam were built out of 100 lb. blocks of cement and one block was laid every minute of the day and night, the dam would have to have been started when the pilgrims landed (1600's) to be completed in the 1930's.

If all the tunnels of the two great train and automobile tunnel systems under the Hudson River, known as the Holland Tunnel & Hudson Tubes, were placed end to end to form just one long tunnel, it would be only 4/5 as long as the combined tunnels built for the Hoover (Boulder) Dam Project.

When full, Lake Mead holds enough water to cover the state of Pennsylvania to a depth of one (1) foot.

During WWII (1939-45), the reservoir created by damming the Colorado River, Lake Mead, could hold all the battleships in the American, English, French, Japanese and Italian navies at anchor 100 feet apart in the lakes lower basin.

The combined flow of the Hudson, Ohio and Columbia Rivers could flow through either of the Hoover Dam spillways (flow capacity 200,000 cubic feet per second.)

The 7 3/4 miles of tunneling concealed beneath the rugged rocks on either side of the Hoover Dam powerhouse vary from man sized tubes to tunnels so big that a 5 story building could be built inside of them.

A city of 6 story warehouse buildings covering 285 city blocks would be required to hold all the materials and supplies used in building Hoover Dam.

The powerhouse structure alone covers an area large enough to contain 3 football fields.

Cold water and ammonia was run through 582 miles of 1 inch piping built right inside the dam - enough pipe to build 3 full scale models of the Eiffel Tower (in Paris, not Las Vegas).

It would take a freight train 160 miles long to haul the Portland cement used in mixing the concrete for Hoover Dam.

Built in a pyramid on the base of the Empire State Building (1248 feet), the concrete used to build Hoover Dam would rise 2 1/2 times higher than this giant building.

The 4,500,000 cu./yds. of concrete used in building the Hoover Dam and its appurtenant works would be sufficient to build a concrete walkway 4 feet wide and 2 3/4 inches thick entirely around the equator of the earth.

If all the materials, equipment and supplies used during construction were placed in one train, the engine would arrive in Boulder City as the caboose left Kansas City, Missouri.

The Colorado River used to deliver an average silt load of 300 tons daily.

BENEFITS OF THE COLORADO RIVER

Flood control

Irrigation

(The two major reasons for building the dam)

Navigation of river

Hydroelectric power

(Revenue from electricity paid for the entire project)

(Six million barrels of oil needed to replace energy created at Hoover Dam)

Silt and sediment control

Recreational opportunities, fish and wildlife enhancement

HOOVER DAM WORK FORCE.

The following information was taken from a newspaper article in the '30's. It shows the breakout, by state, of where the people who built the dam came from.

Alabama	243	Nebraska	157
Arizona	643	Nevada	5522
Arkansas	191	New Jersey	104
California	5055	New Mexico	109
Conneticut	467	New York	221
Colorado	467	New Hampshire	14
Delaware	1	Norh Carolina	120
Florida	66	Ohio	260
Georgia	115	Oklahoma	581
Idaho	599	Oregon	273
Illinois	487	Pennsylvania	238
Indiana	159	Rhode Island	8
Iowa	181	South Carolina	29
Kansas	327	South Dakota	58
Kentucky	103	Tennessee	121
Louisiana	85	Texas	604
Maine	18	Utah	1165
Maryland	66	Virginia	44
Massachusetts	114	Vermont	6
Missouri548		Washington	642
Michigan	251	West Virginia	73
Minnesota	208	Wisconsin	171
Mississippi	50	Wyoming	161
Montanna	340	Foriegn workers	116

Total = over 21,000*

*NOTE: Many documents put the total number of workers on the dam at somewhere over 16,000. This newspaper article from the 30's puts the number at over 16,000. I am not sure what causes the discrepancy, and further research is needed. I have provided this information now, because I believe it to be a good guide as to approximately how many men from each state worked on the project.